IN THE CLAIMS:

1. (Currently Amended) A semiconductor inspection method for simultaneously detecting (1) stuck-at failures and (2) short-circuited adjacent lines in a logic circuit of a semiconductor apparatus, the method comprising:

extracting data representing input ~~adjacent~~ lines of a ~~logical~~ logic circuit of a semiconductor apparatus represented by layout data and identifying combinations of adjacent input lines of said input lines; ~~for avoiding a short circuit occurring between such lines;~~

~~simultaneously detecting any stuck-at failures in the logical circuit and obtaining input logical values from the logical circuit such that extracted data representing one of the adjacent lines has a logical value "1" while extracted data representing the other of the adjacent lines has a logical value "0";~~

selecting one combination of adjacent input lines from said extracted combinations and setting each of said selected adjacent input lines ~~of the logical circuit~~ to a first logical ~~values~~ value of "0" ~~and~~ or "1" and setting said input lines ~~of~~

~~the logical circuit~~ other than the selected adjacent input lines to a second logical value of "0" or "1", ~~or "0",~~ so that ~~when~~ an expected logical output value is output by ~~the logical~~ such logic circuit when a stuck-at failure and a ~~no~~ short circuit ~~exists~~ between the adjacent lines do not exist and an unexpected output logical value is output when at least one of a stuck-at failure and a short circuit ~~exists~~ between the adjacent lines does exist; and

monitoring an output of ~~a logical~~ such logic circuit that receives the input logical values, and comparing the monitored output with an output logical value that is expected when the input logical values are input to ~~the logical~~ such logic circuit.

2. (Currently Amended) A semiconductor inspection method for simultaneously detecting (1) stuck-at failures and (2) short-circuited adjacent lines in a logic circuit of a semiconductor apparatus, the method comprising:

extracting data representing ~~adjacent~~ input lines of a ~~logical~~ logic circuit of a semiconductor apparatus represented

by layout data and identifying combinations of adjacent input lines of said input lines; ~~, a distance between said lines being equal to or less than a threshold;~~

~~simultaneously detecting any stuck-at failures in the logical circuit and obtaining input logical values from the logical circuit such that extracted data representing one of the adjacent lines has a logical value "1" while extracted data representing the other pf the adjacent lines has a logical value "0";~~

selecting one combination of adjacent input lines from said extracted combinations and setting each of said selected adjacent input lines ~~of the logical circuit~~ to a first logical ~~values~~ value of "0" or~~and~~ "1" and setting said input lines ~~of the logical circuit~~ other than the selected adjacent input lines to a second logical value of "0" or "1", ~~or "0",~~ so that ~~when~~ an expected logical output value is output by ~~the logical~~ such logic circuit when a stuck-at failure and a ~~no~~ short circuit ~~exists~~ between the adjacent lines do not exist and an unexpected output logical value is output when at least one of a stuck-at

failure and a short circuit ~~exists~~ between the adjacent lines does exist; and

monitoring an output of a ~~logical~~ logic circuit that receives the input logical values, and comparing the monitored output with an output logical value that is expected when the input logical values are input to ~~the logical~~ such logic circuit.

3. (Currently Amended) A computer-readable recording medium comprising a program for causing a computer ~~the~~ to execute:

extracting data representing input ~~adjacent~~ lines of a ~~logical~~ logic circuit of a semiconductor apparatus represented by layout data and identifying combinations of adjacent input lines of said input lines; ~~, said adjacent lines having a possibility of a short circuit occurring between such lines;~~

~~simultaneously detecting any stuck-at failures in the logical circuit and obtaining input logical values from the logical circuit such that extracted data representing one of the adjacent lines has a logical value "1" while extracted data~~

~~representing the other of the adjacent lines has a logical value "0";~~

selecting one combination of adjacent input lines from said extracted combinations and setting each of said selected adjacent input lines ~~of the logical circuit~~ to a first logical value~~values~~ of "0" ~~and~~ or "1" and setting said input lines ~~of the logical circuit~~ other than the selected adjacent input lines to a second logical value of "0" or "1", ~~or "0",~~ so that ~~when~~ an expected logical output value is output by ~~the logical~~such logic circuit when a stuck-at failure and a ~~no~~ short circuit ~~exists~~ between the adjacent lines do not exist and an unexpected output logical value is output when at least one of a stuck-at failure and a short circuit ~~exists~~ between the adjacent lines does exist; and

monitoring an output of a ~~logical~~ logic circuit that receives the input logical values, and comparing the monitored output with an output logical value that is expected when the input logical values are input to ~~the logical~~ such logic circuit.

4. (Currently Amended) A computer-readable recording medium comprising a recorded program for causing a computer to execute:

extracting data representing input ~~adjacent~~ lines of a ~~logical~~ logic circuit of a semiconductor apparatus represented by layout data and identifying combinations of adjacent input lines of said input lines; ~~, a distance between said lines being not greater than a threshold;~~

~~simultaneously detecting any stuck-at failures in the logical circuit and obtaining input logical values from the logical circuit such that extracted data representing one of the adjacent lines has a logical value "1" while extracted data representing the other of the adjacent lines has a logical value "0";~~

selecting one combination of adjacent input lines from said extracted combinations and setting each of said selected adjacent input lines ~~of the logical circuit~~ to a first logical value~~values~~ of "0" or~~and~~ "1" and setting said input lines ~~of the logical circuit~~ other than the selected adjacent input lines to a second logical value of "0" or "1", ~~"0",~~ so that ~~when~~ an

expected logical output value is output by ~~the logical~~ such logic circuit when a stuck-at failure and a ~~no~~ short circuit ~~exists~~ between the adjacent lines do not exist and an unexpected output logical value is output when at least one of a stuck-at failure and a short circuit ~~exists~~ between the adjacent lines does exist; and

monitoring an output of a ~~logical~~ logic circuit that receives the input logical values, and comparing the monitored output with an output logical value that is expected when the input logical values are input to ~~the logical~~such logic circuit.